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OBSERVATIONS ON BATS FROM TRINIDAD, WITH A CHECKLIST OF SPECIES OCCURRING ON THE ISLAND

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In their comprehensive treatment of the bats of Trinidad, Goodwin and Greenhall (1961) reported 58 species from the island. Subsequent authors (Goodwin and Greenhall, 1962, 1964; Genoways et al., 1973a; LaVal, 1973a, 1973b) have added some species to the list and changed the status of others so that the known chiropteran fauna of Trinidad now comprises 64 species: five emballonurids, one noctilionid, four mormoopids, 36 phyllostomids (see Handley, 1980, for family-group names), one natalid, one furipterid, one thyropterid, seven vespertilionids, and eight molossids. Among the phyllostomids, the subfamilies Phyllostominae (15) and Stenodermatinae (14) are the best represented, whereas only a few species of the other three subfamilies—Glossophaginae (four), Carolliinae (one), and Desmodontinae (two)—are present.

In this paper, we report additional data on 55 species. These data add to the available information concerning distribution, reproduction, and molt. Where appropriate, we have included taxonomic comments on the status of Trinidadian populations. Material reported here is the result of three collecting trips to Trinidad led by R.J. Baker.

METHODS AND MATERIALS

Specimens reported herein all are deposited in The Museum, Texas Tech University, except those marked CM, which are housed in the Section of Mammals, Carnegie Museum of Natural History. External measurements, except length of forearm, are those recorded by the collector on the specimen labels; length of forearm and cranial measurements were taken by means of dial calipers. Methods of taking these later measurements follow Genoways and Williams (1979). All measurements are given in millimeters.

Reproductive condition was determined by gross dissection of specimens in the field or by later dissection of fluid-preserved animals in the laboratory. Fetus length is given as crown-rump measurement; testicular size is denoted by total length. Presence of molt was determined by examination of those individuals prepared as standard museum study specimens.

ACCOUNTS OF SPECIES

Peropteryx macrotis trinitatus Miller

Specimen examined (1).—St. George Co.: Blanchisseuse, 1.

The specimen is an adult female that evinced no reproductive activity or molt when taken on 14 August.

Rhynchonycteris naso (Wied-Neuwied)

Specimens examined (10).—St. George Co.: Blanchisseuse, 10.

Pregnant females, each carrying a single fetus, were taken on the following dates: 13 July (21 crown-rump length); 6 August; 14 August (two individuals, crown-rump lengths 15 and 16). One female taken on 14 August was not pregnant. Testicular measurements of three males taken on 6 August were 3, 3, and 3. Molt was observed in individuals taken on 13 July (1) and 14 August (two of four specimens).

Husson (1962) has presented the reason for use of the generic name *Rhynchonycteris* instead of *Rhynchiscus*, as employed by Goodwin and Greenhall (1961).

Saccopteryx bilineata bilineata (Temminck)

Specimens examined (14).—St. George Co.: Blanchisseuse, 1; Caura Valley, 3; Las Cuevas, 2; San Rafael, 2 (1 CM); 2 mi. E San Rafael, 2. Mayaro Co.: Guayaguayare, 4.

All specimens examined were taken in August. None of the 11 females was pregnant and only one of 11 was lactating. Two males taken on 7 August had testes that were 2 and 3 in length.

Of nine specimens examined for molt, five were molting on the following dates: 8 August (2); 10 August; 14 August; 19 August.

Husson (1962) did not think that *S. b. perspicillifer*, used by Goodwin and Greenhall (1961), could be separated from *S. b. bilineata* at the subspecific level. Subsequently, Alvarez (1968) has recognized *S. b. centralis* as a valid taxon; therefore, the appropriate trinomial for the Trinidadian specimens would be *S. b. bilineata*.

Saccopteryx leptura (Schreber)

Specimens examined (5).—St. George Co.: Blanchisseuse, 3; Caura Valley, 2.

A female taken on 8 August was not pregnant. Two specimens collected on 14 August and one taken 15 August showed signs of molting.

Noctilio leporinus mastivus (Vahl)

Specimens examined (4).—St. George Co.: Blanchisseuse, 2; Las Cuevas, 2.

Nonpregnant females were taken on 12 July and 5 August. Molt was recorded from one specimen taken on 12 July, two taken on 5 August, and one taken on 14 August. We follow Davis (1973) in use of the subspecific name *mastivus* for populations on Trinidad.

Mormoops megalophylla tumidiceps Miller

Specimens examined (3).—St. George Co.; Las Cuevas, 2. St. David Co.; Zagaya Cave, 1 (CM).

Testes of two males taken on 2 and 8 August each measured 2. A specimen captured on 5 August revealed evidence of molt.

Pteronotus davyi davyi Gray

Specimens examined (4).—St. George Co.: Blanchisseuse, 1; Caura Valley, 1. Mayaro Co.: Guayaguayare, 2.

Our four specimens are nonpregnant females taken on 12 July, 8 August, 10 August, and 14 August. The first three specimens were undergoing molt when captured. These are the first specimens of this species to be recorded from Mayaro County.

Pteronotus parnellii rubiginosus (Wagner)

Specimens examined (33).—St. George Co.: Blanchisseuse, 14; Caura Valley, 1; Las Cuevas, 7; Maracas Valley, 2 mi. N (by road) St. Joseph, 3; San Rafael, 6 (2 CM). St. Andrew Co.: Tamana Cave, 1, Mayaro Co.: Guayaguayare, 1.

The females examined were collected between 3 to 7 August. None was pregnant, but four were lactating. The following testicular measurements were recorded for adult males (date of capture in parentheses): 4 (2 August); 3 (3 August); 3, 3, 3, 3, 3, 3, 4, and 5 (6 August); 4 (7 August). Of 21 specimens obtained between 10 July and 21 August that were examined for molt, 17 were actively molting.

We follow Smith (1972) in use of the above name combination in place of *Chilonycteris rubiginosa fusca* used by Goodwin and Greenhall (1961).

Pteronotus personatus personatus (Wagner)

Specimen examined (1).—St. George Co.: Blanchisseuse, 1.

A nonpregnant female was taken on 6 August. We follow Smith (1972) in the use of the current name combination.

Lonchorhina aurita aurita Tomes

Specimens examined (14).—St. George Co.: island near Las Cuevas, 5; Saut d'Eau Cave, 9.

Nonpregnant females were taken on 13 July (two), 14 July (one), and 20 August (three). All of our specimens were taken in July and August and all were undergoing molt. External and cranial measurements of eight specimens are given in Table 1.

Micronycteris brachyotis (Dobson)

Specimens examined (4).—St. George Co.: Blanchisseuse, 2; Maracas Valley, 1. Mayaro Co.: Guavaguayare, 1.

Nonpregnant females were taken on 5, 11, and 14 August. Three individuals evincing molt were collected on the latter two dates. Our specimen from Mayaro is the first recorded from that county. Measurements of three specimens are given in Table 1.

Micronycteris hirsuta (Peters)

Specimens examined (4).—St. George Co.: Blanchisseuse, 1; Las Cuevas, 1. Mayaro Co.: Guayaguayare, 2.

A female obtained on 19 August was not pregnant. Molt was recorded on three specimens collected on 15 and 19 August. Our specimens from Mayaro are the first reported from that county. Measurements of these specimens are given in Table 1.

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TTU: Caratog no sex. and locality	Tsoal Angasi	lo digne.J [t6]	lo digned tool brid	Ген д гр ој	lo digniv.l missiol	Greatest length Ilusks to	Condylobasal length	Ууgотзайс Бгезай	lsiidroizo¶ dibsərd	lo dibestA sesmicid	lo digned vordiooi (tellixem	ssoras dibesid eislom isqqu
				Γ_{c}	Lonchorhina aurita	urita						
5329 Q Island near Las Cuevas	111.0	53.0	14.0	28.0	47.1	20.8	19.1	10.4	4.9	8.9	6.7	7.1
5322 9 Island near Las Cuevas	110.0	53.0	14.0	29.0	50.8	20.5	18.6	10.8	4.9	œ œ	9.9	7.0
8984 9 Island near Las Cuevas	0.901	51.0	14.0	30.0	51.1	20.6	18.7	10.8	4.9	8.9	9.9	7.0
5321 of Island near Las Cuevas	112.0	54.0	12.0	30.0	49.0	20.7	18.9	10.5	4.9	8.7	9.9	7.0
5323 of Island near Las Cuevas	108.0	49.0	15.0	30.0	50.0	20.4	19.0	8.01	4.8	8.7	9.9	7.1
8983 of Island near Las Cuevas	108.0	58.0	14.0	81.0	49.7	20.8	18.9	6.01	4.9	8.8	9.9	7.
9827 of Island near Las Cuevas	111.0	55.0	14.0	31.0	49.9	20.7	18.7	10.4	5.0	8.7	9.9	7.1
9829 o' Island near Las Cuevas	111.0	58.0	12.0	81.0	49.8	20.5	18.7	10.4	4.9	8.7	9.9	7.(
				Micr	Micronycteris brachyotis	chyotis						
5237 Q Maracas Valley	59.0	13.0	10.0	16.0	39.4	21.3	18.5	10.2	5.0	8.6	 	6.7
5315 9 Blanchisseuse	70.0	13.0	14.0	18.0	40.9	21.6	19.0	10.4	5.1	8.4	9.8	6.9
5314 o' Blanchisseuse	72.0	13.0	11.0	19.0	39.4	21.9	19.2	10.5	5.2	8.9	8.2	7.0
				M	Micromyc teris hirsuta	rsuta						
5299 9 Guayaguayare			15.0	28.0	43.0	8.83	20.6	11.8	5.2	æ.	9.4	7.5
5410 of Las Cuevas	0.99	16.0	12.0	26.0	42.1	24.0	20.2	11.6	5.0	6.8	9.5	7.4
5449 of Blanchisseuse	64.0	11.0	10.0	28.0	42.3	28.7	20.3	11.3	4.9	8.7	6.8	7.2
10, 116 d' Guayaguayare	78.0	15.0	12.0	22.0	42.7	24.3	20.7	11.5	5.0	8.5	9.2	7.8
				Mic	Micronycleris megalotis	galotis						
5438 of Las Cuevas	51.0	9.6	6.0	21.0	32.6	18.4	16.0	8.9	4.0	7.5	6.9	6.0

TABLE 1.—Continued.

											3.0
51.0	10.0	6.6	21.0	32.2	18.7	16.2	8.6	3.8	7.4	6.9	0.9
65.0	17.0	8.0	18.0	33.4	18.5	15.9	R.7	3.7	7.6	7.0	6.1
			Mic	Милопулеть типива	unuta						
65.0	0.01	10.0	23.0	36.5	18.5 1.8.1	6.61	8.6	4.3	7.6	6.6	5.7
52.0	0.01	10.0	22.0	35.6	18.6	15.8	9.6	1.0	7.5	6.5	5.7
49.0	9.0	10.1	23.0	36.5	18.8	16.4	:C:8	4.0	7.5	6.7	5.6
54.0	11.0	9.0	20.0	34.6	18.4	16.0	8.4	4.0	972	6.5	5.5
55.0	11.0	0.11	21.0	36.2	<u>x</u> .x	1.91		- -	7.1	6.6	5.4
65.0	10.0	13.0	20.0	35.3	1 <u>x</u> .x	16.5	8.6	6.1	7.1	6.8	5.6
62.0	12.0	0.11	23.0	34.9	18.3	16.0	x.	1:2	7.5	6.7	5.5
63.0	11.0	13.0	23.0	35.5	19.0	16.2	× ×	4.0	7.4	6.7	5.5
65.0	10.0	14.0	24.0	35.2	18.7	16.5	8.7	-	5.6	6.4	5.5
			Me	Micromycleris nicefori	cefori						
65.0	11.0	12.0	18.0	40.2	95.0	9.61	8.6	1.5	×.	#.7.	6.3
7.4.0	11.0	12.0	20.0	40.0	21.4	19.3	6.6	- ;	8.2	7.7	6.0
64.0	0.6	15.0	19.0	38.8	21 21	6.91	4.6	4.2	9.7	7.6	6.3
0.49	9.0	0.11	15.0	38.1	1.12	19.0	8.6	T.	8°.30	7.5	6.3
66.0	11.0	12.0	15.0	39.3	21.5	19.1	9.1	4.2	- x	5.6	9.6
0.69	8.0	13.0	19.0	37.6	21.3	6.81	6.5	일	×. ×	7.6	6.5
62.0	0.9	13.0	16.0	36.8	1.12 1.12	6.81	6.6	0.7	8.0	7.6	6.5
59.0	9.0	12.0	17.0	37.1	20.7	18.2	9.5	4.8	8.3	7.9	6.3
59.0	11.0	14.0	18.0	36.3	20.8	<u>x</u>	9.6	4.2	8.2	7.6	6.1
58.0	7.0	13.0	18.0	39.1	20.8	<u>×</u>	9.3	4.0	×.5	7.5	6.3
			N	Memon e renulatum	ıtıını						
79.0	25.0	11.0	25.0	45.9	22.0	19.2	19.5	0.4	-	67	9.0
71.0	21.0	13.0	25.0	/ XT	22.6	5.61	12.0	£.3	8.6	7.7	œ.
75.0	22.0	10.0	25.0	17.0	21.6	18.7	11.6	3.9	7.9	7.5	1C.
71.0	15.0	13.0	25.0	51.0	22.4	19.6	1.8	1.9	, x	7.6	œ
76.0	95.0	12.0	25.0	17.3	21.6	<u>x</u>	11.7	8.9	8.1	7.7	÷
						0 0.					

TABLE 1.—Continued.

				h	Phylloderma stenops	· uobi						
5318 q Blanchisseuse	110.0	18.0	20.0	26.0	65.8	30.0	25.3	14.6	6.8	12.1	9.6	8.6
					Tonatia bidens	ns						
5260 Q Las Cuevas	88.0	15.0	15.0	29.0	55.8	27.9	23.7	13.7	5.3	10.2	9.6	8 .3
9774 9 Blanchisseuse	94.0	19.0	13.5	30.0	54.8	28.3	24.1	14.3	5.4	10.6	8.9	∓. œ
9778 9 Blanchisseuse	85.0	16.0	12.0	30.0	55.2	28.3	23.5	14.0	5.2	10.4	9.6	8.6
5261 of Las Cuevas	84.0	12.0	14.0	31.0	55.1	28.6	24.2	14.5	5.6	10.6	9.6	8.5
5338 of Caura Valley					54.9	27.6	23.1	13.9	5.1	10.7	9.4	œ
5339 o' Blanchisseuse	75.0	16.0	16.0	28.0	51.5	27.3	23.1	13.8	9.6	10.6	9.5	9.6
				1	Tonatia brasilense	ense						
5238 9 Maracas Valley	68.0	9.0	11.0	25.0	35.8	20.1	16.9	9.6	5.9	0.8	6.9	6.2
5222 of Guayaguayare	76.0	0.6	11.0	23.0	36.3	20.2	16.8	9.6	3.2	∓ œ	7.0	6.1
5309 of Guayaguayare	0.09		11.0	22.0	34.5	20.2	16.8	9.6	3.1	8.2	6.7	6.4
10,119 of Guayaguayare	75.0	9.6	10.0	20.0	35.2	20.8	17.3	10.0	3.3	æ.	6.9	6.4
5422 of Maracas Valley	0.09	8.0	10.0	25.0	35.5	20.6	17.6	0.01	3.4	8.5	7.0	6.7
5484 o' San Rafael	56.0	9.0	10.0	20.0	35.9	20.8	17.2	10.0	3.3	8.6	6.9	6.4
				1.4	Гатругит spectrum	.trum						
5357 Q Santa Maria	142.0		30.0	17.0	102.0	51.2	42.9	23.3	8.0	15.8	20.9	t.5
9837 Q Sangre Grande	146.0		30.5	47.0	103.3	51.6	44.0	23.4	7.7	15.7	21.1	15.4
9836 of Sangre Grande	147.0		31.0	6.61	106.1	52.4	44.1	24.2	7.8	15.8	21.1	15.2
11,439 of Sangre Grande	143.0		32.0	43.0	107.1	52.0	48.2	25.2	# xò	16.4	20.6	15.4

Micronycteris megalotis megalotis (Gray)

Specimens examined (13).—St. George Co.: Blanchisseuse, 3; Las Cuevas, 5; Maracas, 2. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Nariva Co.: 5 mi. mark Plum Mitan Road, 1. Mayaro Co.: Guayaguayare, 1.

Two females obtained on 2 and 8 August were not pregnant. Testicular measurements for adult males were as follows (dates of capture in parentheses): 1 (2 August); 2 (5 August); 2, 3 (6 August); 1 (8 August). Bats evincing molt were taken on 8 July, 5 August, 15 August, and 18 August. Our specimen from Nariva is the first recorded in that county. Measurements for five specimens are given in Table 1.

Micronycteris minuta (Gervais)

Specimens examined (14).—St. George Co.: Blanchisseuse, 3; Las Cuevas, 3; Maracas Valley, 2; San Rafael, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 4.

No fetuses were found in nine females collected between 3 to 10 August. Molt was observed on 10 specimens obtained between 5 to 19 August. Measurements of nine specimens are given in Table 1.

Micronycteris nicefori Sanborn

Specimens examined (26).—St. George Co.: Blanchisseuse, 2; Caura Valley, 2; Las Cuevas, 1. St. Andrew Co.: Sangre Grande, 12; 2 mi. N, 2 mi. E Valencia, 2. Mayaro Co.: Guayaguayare, 7.

No fetuses were found in six females taken on 13 July, three on 5 August, two on 8 August, or two on 19 August. Two males with testes measuring 2 and 2 were collected on 5 August. Twenty-one specimens obtained between 10 July and 19 August were undergoing molt. All specimens reported by Goodwin and Greenhall (1961) were from St. Patrick County. Measurements of 10 specimens are given in Table 1.

Mimon crenulatum crenulatum (É. Geoffroy St.-Hilaire)

Specimens examined (11).—St. George Co.: Blanchisseuse, 2; Caura Valley, 1; Las Cuevas, 3; Maracas, 2; San Rafael, 1; 2 mi. E San Rafael, 1. Mayaro Co.: Guayaguayare, 1.

All specimens examined were taken between 4 to 8 August. Four of these were nonpregnant females; one was lactating, however. Testicular measurements were 3 for one male (5 August) and 2 for another (7 August). No molt was recorded from three specimens collected on 5 August and one on 6 August, but molt was

observed on two specimens taken on 4 August and one on 8 August. Only four specimens of this species have been recorded from Trinidad previously (Goodwin and Greenhall, 1964). The specimen from Mayaro is the first to be recorded from that county. Measurements of six specimens are given in Table 1.

Phylloderma stenops (Peters)

Specimens examined (3).—St. George Co.: Blanchisseuse, 1; Maracas, 1. St. Andrew Co.: 2 mi, N, 2 mi, E Valencia, 1.

Our three specimens are nonpregnant females taken on 5, 8, and 14 August. The specimen taken on the last date was molting. Only two specimens from Arima, St. George County, of this rare species have been recorded previously from Trinidad (Goodwin and Greenhall, 1964). Measurements of one specimen are given in Table 1.

Handley (1966) considered this to be a monotypic genus with all South American specimens assignable to this subspecies.

Phyllostomus discolor discolor Wagner

Specimens examined (25).—St. George Co.: Blanchisscuse, 2; Las Cuevas, 8; Maracas, 9; Maracas Valley, 2 mi. (by road) N St. Joseph, 1 (CM); San Rafael, 1. Mayaro Co.: Guayaguayare, 4 (1 CM).

Ten nonpregnant females were collected between 2 to 8 August. Testicular measurements for adult males were as follows (dates of capture in parentheses): 4, 5, 11 (2 August); 12 (4 August); 3 (5 August); 4, 4 (6 August); 4, 5, 5 (8 August). Seven of nine specimens taken in August were undergoing molt. Our specimens from Mayaro are the first reported from southeastern Trinidad. Although Power and Tamsitt (1973) suggested that *P. discolor* is monotypic, we have chosen to recognize subspecies until more data are available.

Phyllostomus hastatus hastatus (Pallas)

Specimens examined (15).—St. George Co.: Blanchisseuse, 4; Las Cuevas, 8 (2 CM); Maracas, 2. Mayaro Co.: Guayaguayare, 1.

No fetuses were found in 10 females collected between 7 July and 12 August. Testicular measurements for adult males were as follows (dates of capture in parentheses): 4, 4, 4, 4, 5, 6, 6, 7 (2 August); 4, 4 (6 August); 5 (8 August). An individual taken on 5 August was molting. No molt was observed on 20 other individuals taken between 2 to 18 August. Our specimen from Mayaro is the first recorded from that county.

Tonatia bidens bidens (Spix)

Specimens examined (12).—St. George Co.: Blanchisseuse, 3; Caura Valley, 1; Las Cuevas, 7. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1.

Nonpregnant females were taken on 12 July (one specimen), 2 August (three), and 5 August (two). The testes of a male taken on 2 August measured 3, and for one taken on 5 August they measured 2. Molt was recorded from individuals taken on 12 July, 5 August, and 10 August. Our specimens are the first recorded from St. George and St. Andrew counties. Measurements for six specimens are given in Table 1. Koopman (1976) first applied the trinomial *T. b. bidens* to Recent specimens of this species.

Tonatia brasiliense Peters

Specimens examined (7).—St. George Co.: Maracas Valley, 2; Santa Maria, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 3.

Single, nonpregnant females were taken on 5 and 11 August. Molt was observed between 10 July and 19 August. Our specimens from Mayaro are the first recorded from that county. Measurements of six specimens are given in Table 1. We follow Gardner (1976) and other recent authors (Handley, 1976; Koopman, 1978) in using the specific name *brasiliense* for all small South and Middle American members of the genus; we are uncertain as to whether or not subspecies should be recognized.

Trachops cirrhosus cirrhosus (Spix)

Specimens examined (3).—St. George Co.: Blanchisseuse, 3.

Two females collected on 12 July were not pregnant. These two specimens plus another taken on this date were undergoing molt. Our specimens are the first to be recorded from St. George County. We follow Jones and Carter (1976) in the use of the subspecific name.

Vampyrum spectrum (Linnaeus)

Specimens examined (4).—St. George Co.: Santa Maria, 1. St. Andrew Co.: Sangre Grande, 3.

No reproductive data are available for our specimens. Three obtained on 14 and 15 July exhibited molt. The species has not been recorded previously from St. Andrew County. Measurements of four specimens are listed in Table 1. Husson (1962) and Handley (1966) have considered this species to be monotypic.

Anoura geoffroyi geoffroyi Gray

Specimens examined (41).—St. George Co.: Blanchisseuse, 3; Las Cuevas, 7; Maracas Valley, 1; San Rafael, 5. St. Andrew Co.: Mt. Tamana Cave, 19 (2 CM); Valencia, 5. Mayaro Co.: Guayaguayare, 1.

No fetuses were found in 13 females collected on 5 and 6 August. The mean testicular length of 18 males collected from 2 to 6 August was 5.9 (range, 2-7). Molt was observed on 31 specimens collected between 7 July and 15 August. The specimen from Mayaro is the first recorded from that county.

Choeroniscus intermedius (J. A. Allen and Chapman)

Specimens examined (44).—St. George Co.: Blanchisscuse, 5; Las Cuevas, 16; Maracas Valley, 1; San Rafael, 7; 2 mi. E San Rafael, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 13.

No fetuses were found in six females taken between 2 to 7 August. Molt was observed on 13 of 37 individuals taken between 7 July and 21 August. An extensive analysis of nongeographic variation in this sample was presented by Genoways *et al.* (1973*b*).

Glossophaga soricina soricina (Pallas)

Specimens examined (80).—St. George Co.: Blanchisscusc, 18; Las Cuevas, 10 (2 CM); Maracas Valley, 3; San Rafael, 10. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 7. Nariva Co.: 5 mi. mark Plum Mitan Road, 4. Mayaro Co.: Guayaguayare, 28.

No fetuses were found in 43 females caught between 2 to 18 August. One female taken on 2 August and another captured on 5 August were lactating. The mean testicular length of 18 males taken between 2 and 6 August was 3.7 (range, 2-5).

Carollia perspicillata perspicillata (Linnaeus)

Specimens examined (232).—St. George Co.: Blanchisseuse, 90 (2 CM); Caura Valley, 10; Las Cuevas, 63 (2 CM); Maracas Valley, 1; San Rafael, 20 (4 CM). St. Andrew Co.: Tamana Cave, 2; 2 mi. N, 2 mi. E Valencia, 20. Nariva Co.: 5 mi. mark Plum Mitan Road, 1. Mayaro Co.: Guayaguayare, 25.

Females all containing single fetuses were taken on the following dates (mean crown-rump length, range in parentheses, and sample size): 2 August, 18.0 (13-22) 5; 5 August, 20.0 (12-26) 4; 6 August, 24.4 (18-33) 10; 7 August, 20; 21 August, 21. A female carrying minute twin embryos was taken on 6 August. Four lactating females were taken on 6 August and three were taken on 7 August. Females exhibiting enlarged uteri were obtained on 2 August (two individuals), 4 August (one), 5 August (three), and 6

August (one). The mean length of testes for 88 adult males taken between 2 to 7 August was 4.1 (range, 2-7). Individuals exhibiting molt were taken on the following dates (number molting followed by total number examined in parentheses): 7 July, 2 (2); 2 August, 8 (8); 3 August, 1 (1); 4 August, 5 (5); 5 August, 21 (22); 6 August, 71 (88); 7 August, 15 (19); 18 August, 1 (1); 19 August, 3 (5); 21 August, 11 (15). Although Pine (1972) did not formally recognize subspecies in this species, we continue to use this trinomial.

Ametrida centurio Gray

Specimens examined (93).—St. George Co.: Blanchisseuse, 15 (1 CM); Caura Valley, 1; Las Cuevas, 70; Maracas Valley, 1; 2 mi. E San Rafael, 2. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 4.

Of 49 females taken on 7 July, 17 contained single fetuses that averaged 21.2 (12-29) in crown-rump length. Other pregnant females were taken on the following dates (crown-rump length in parentheses): 8 July (19, 29); 2 August (9); 6 August (6); 11 August (27). Testicular measurements were 2 for a male taken on 5 August and 3 for one taken on 6 August. Molt was observed on 67 specimens collected between 7 July and 18 August, whereas 16 taken on 7 July and one taken 8 July were not molting. Only four specimens have been reported from Trinidad previously (Goodwin and Greenhall, 1964) and our material from St. Andrew is the first to be recorded from that county. Our material will form the basis of a forthcoming report on variation in this species. Peterson (1965) has shown that *Ametrida* is a monotypic genus.

Artibeus cinereus cinereus (Gervais)

Specimens examined (113).—St. George Co.: Blanchisseuse, 13; Caura Valley, 2; Las Cuevas, 48 (4 CM); Maracas Valley, 3 (1 CM); San Rafael, 17 (1 CM). St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 8. Nariva Co.: 5 mi. mark Plum Mitan Road, 2. Mayaro Co.: Guayaguayare, 20.

Females carrying single fetuses were taken on the following dates (crown-rump lengths in parentheses): 7 July (21); 2 August (11, 13, 19, 23, 31); 6 August (27). Mean length of testes for 22 males taken between 2 to 7 August was 3.8 (range, 2-6). Molt was observed on 61 of 93 specimens examined from the period 7 July to 21 August. We follow Jones and Carter (1976) in the use of trinomials for this species.

Artibeus jamaicensis trinitis Andersen

Specimens examined (182).—St. George Co.: Blanchisseuse, 49; Caura Valley, 10; Las Cuevas, 27; Maracas Valley, 60 (6 CM); San Rafael, 13 (7 CM). St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 2 (1 CM). Mayaro Co.: Guayaguayare, 21.

Pregnant females were collected on the following dates (crown-rump length of fetuses in parentheses): 2 August (21, 50, 55); 3 August (24, 28); 5 August (35); 6 August (33, 55). Lactating females were obtained on 3 August (two individuals), 6 August (eight), 10 August (two). Mean length of testes for 63 males taken between 2 to 7 August was 6.3 (range, 2-12). Molt was observed on 111 specimens taken between 8 July and 21 August. Our specimens from St. Andrew and Mayaro are the first recorded from those counties.

Artibeus lituratus palmarum J. A. Allen and Chapman

Specimens examined (43).—St. George Co.: Blanchisscuse, 12; Las Cuevas, 8; Maracas Valley, 16. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 2. Mayaro Co.: Guyaguayare, 5.

Two females obtained on 2 August contained single fetuses measuring 47 and 52 in crown-rump length, whereas one taken on 21 August possessed an embryo measuring 12. Three females taken on 3 August were lactating as were single females netted on 6 and 8 August. Mean length of testes for 20 males taken between 2 to 8 August was 6.2 (range, 4-8). Molt was observed on one specimen taken on 8 July and 23 taken between 3 to 8 August. Our specimens from St. Andrew and Mayaro are the first to be recorded from those counties.

Centurio senex greenhalli Paradiso

Specimens examined (4).—St. George Co.: Blanchisseuse, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 2. Mayaro Co.: Guayaguayare, 1.

Two females collected on 5 August were not pregnant. A specimen taken on 10 August exhibited molt. This subspecies was described by Paradiso (1967) based upon material from Trinidad.

Chiroderma trinitatum trinitatum Goodwin

Specimens examined (14).—St. George Co.: Blanchisseuse, 3; Las Cuevas, 3; 2 mi. E San Rafael, 3 (1 CM). St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 4.

Single fetuses were found in females taken on 6 August (crownrump length, 29) and 10 August (30). Nonpregnant females were taken on 2 August (one individual), 7 August (three), 10 August (two), and 19 August (one). Testes measurements were 3 and 4 for males obtained on 5 and 6 August, respectively. Five specimens exhibiting molt were taken between 5 and 19 August. Only six specimens have been reported from Trinidad previously (Goodwin and Greenhall, 1964) and our specimens from Mayaro are the first recorded from that county. Currently, two subspecies (Barriga-Bonilla, 1965; Handley, 1966) are recognized within this species; however, an analysis of variation within species will form the basis of another report.

Chiroderma villosum villosum Peters

Specimens examined (28).—St. George Co.: Blanchisseuse, 4; Caura Valley, 1; Las Cuevas, 6; Maracas Valley, 1; San Rafael, 4. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 3 (1 CM). Nariva Co.: 5 mi. mark Plum Mitan Road, 1. Mayaro Co.: Guayaguayare, 8.

A female obtained on 6 August carried a single fetus, whereas none of 12 females collected between 4 to 21 August was pregnant. Mean length of testes for seven males taken between 2 to 10 August was 3.4 (range, 1-5). Only four specimens have been reported previously from Trinidad and all of ours, except those from St. George, represent new county records. Measurements of nine specimens are listed in Table 2.

Enchisthenes hartii (Thomas)

Specimens examined (2).—St. George Co.: Blanchisseuse, 1; Maracas Valley, 1.

A female taken on 15 August was not pregnant and was molting. A male taken on 11 August was not undergoing molt. Apparently, these are the first specimens of this species to be reported (Baker and Lopez, 1968) from Trinidad since it was originally described on the basis of a single specimen from the Royal Botanic Gardens, Port-of-Spain (Thomas, 1892). Measurements of our specimens are listed in Table 2.

Mesophylla macconnelli flavescens Goodwin and Greenhall

Specimens examined (52).—St. George Co.: Las Cuevas, 2; 2 mi. E San Rafael, 4. Mayaro Co.: Guayaguayare, 46 (2 CM).

Females carrying single fetuses were taken on the following dates (crown-rump lengths of embryos in parentheses): 4 August (13, 15); 18 August (19, 22, 23, 25); 19 August (17). Lactating females were obtained on 4 August (one specimen), 7 August

TABLE 2.—External and cranial measurements of six species of stenodermatines and two species of desmodontines from Trinidad.

T.H. Catalog no., sex, and locality	्राज्या प्राप्तान	lo digus.L Iooi briid	ित्मप्रसम् स्ट	ю фунь.1 тизној	मित्रकारम् विद्याप्ताः सम्बद्धाः	bseadol/buo/) dignəl	лівано <u>д Х</u> дібе н а	Posteribital	lo adibisofd Sesiniste	io dignyl wordioor zuslizgan	esotos dibsərð zislom reqqu
				Chirode	Chiroderma villosum						
5289 Q Guavaguayare	83.0	16.0	93.0	46.5	26.0	23.4	16.1	5.7	10.8	9.1	11.6
5353 9 Guayaguayare	73.0	16.0	19.0	47.9	26.6	23.6	16.5	5.8	11.0	1.6	12.0
5354 9 Guayaguayare	75.0	12.0	18.0	17.2	26.2	23.1	17.0	6.2	10.4	0.6	12.0
5361 9 Guayaguayare	64.0	11.0	17.0	16.8	24.9	7.55	15.3	5.5	0.01	∞. ∞	11.6
5421 9 San Ralael	70.0	12.0	17.0	45.3	25.0	29.4	16.0	5.6	11.0	5.7	11.5
5262 of Las Cuevas	75.0	12.0	17.0	45.9	26.4	23.3	16, 1	6.2	11.3	9.1	11.5
5568 of Lay Cuevas	62.0	11.0	17.0	44.3	26.0	6.22	15.7	6.1	10.8	9.0	11.6
5276 of 5 mi mark Plum Mitan Rd.	73.0	11.0	17.0	46.0	25.3	1.55	15.7	6.6	10.5	8.5	Ξ
9016 of Guavaguayare	76.0	11.0	18.0	8.91	26.5	22.8	15.1	2.6	10.6	8.6	10.9
				Enchr	Enchasthenes harm						
5371 9 Blanchisseuse	57.0	12.0	15.0	38.6	20.5	18.3	12.0	5.7	9.4	6.8	œ
5243 of Matacas Valles	62.0	9.0	14.0	58.5	20.4	18.7	13.3	5.6	6.6	6.8	9.0
				Num	Starmra lilium						
5367 9 Maracus Valley	59.0	13.0	15.0	42.5	23.4	20.4	13.6	6.0	10.3	6.1	ž
5407 9 Maracas Valley	65.0	11.0	16.0	13.9	92.9	20.2	13.7	3C.1G	10.5	6.1	8.2
5669 Q Las Cuevas	0.00	0.01	15.0	12.1	22.7	19.9	13.4	5.6	10.1	6.5	8.0
5670 Q Las Cuevas	61.0	12.0	14.0	H.1	80 61 80 10 10 10 10 10 10 10 10 10 10 10 10 10	6.61	13.6	6.2	10.4	6.3	8.0
5671 Q Las Carvas	59.0	11.0	16.0	40.5	22.5	20.0	13.2	5.9	6.6	6.2	7.9
5408 of Manacas Valley	59.0	13.0	15.0	43.2	23.1	20.1	13.8	6.0	10.4	6.6	98.2
5415 of Las Cuevas	68.0	17.0	17.0	6 11	23.2	20.3	13.7	6.3	10.5	6.3	6.7
5775 of Caura Valley	63 0	12.0	16.0	11.3	6.55	20.4	13.6	6.4	10.5	8.8	æ 7.
5776 of Cauta Valles	61.0	12.0	16.0	12.7	35.5	19.6	13.1	5.9	10.5	6.1	8.0

TABLE 2.—Continued.

				Star	Sturming tildae						
5405 9 Blanchisseuse	0.99	15.0	17.0	44.2	23.1	20.5	14.1	5.9	10.8	9.9	8°.
5406 9 Blanchisseuse	65.0	0.11	19.0	44.0	23.6	21.1	14.6	6.0	10.7	6.8	
5667 Q Las Cuevas	62.0	0.11	18.0	44.1	23.9	21.5	14.3	6.1	10.8	6.9	8.5
5786 Q Cuara Valley	65.0	13.0	17.0	44.7	24.3	21.8	14.3	5.7	10.6	7.1	8.3 5.3
5791 Q Cuara Valley	65.0	11.0	14.0	43.4	22.8	20.5	13.7	6.1	10.4	9.9	7.8
5337 d' Guayaguayare				14.7	23.9	21.1	14.2	6.3	10.7	7.1	6.8
5372 of Blanchisseuse	67.0	14.0	16.0	44.5	23.1	20.5	14.0	5.9	10.6	6.9	9.2
5402 of Blanchisseuse	0.69	13.0	18.0	46.3	24.4	22.2	14.7	9.9	10.7	7.4	8.6
5464 of Maracas Valley	63.0	19.0	17.0	44.2	23.7	21.5	14.6	6.5	11.0	8.9	90.00 0.00
				Urodern	Uroderma bilobatum						
5327 Q Cuara Valley	62.0	14.0	17.0	42.1	23.6	20.8	12.8	4.6	9.5	8.2	9.4
5485 9 Cuara Valley	53.0	9.6	17.0	9.68	23.0	20.6	12.5	5.3	9.3	7.9	8.6
5813 9 San Rafael	0.09	0.01	16.0	42.4	23.6	21.4	13.0	5.6	9.4	8.5	6.6
5254 of Las Guevas	67.0	11.0	0.71	43.1	24.7	22.1	13.4	5.7	6.6	8.6	6.6
5300 d' Guayaguayare	63.0	12.0	19.0	40.5	23.7	21.6	13.1	5.4	9.7	8.8	9.5
5301 & Guayaguayare	0.19	12.0	20.0	41.4	24.0	21.0	12.8	5.5	9.4	7.9	8.9
5302 d' Guayaguayare	0.09	12.0	17.0	37.5	22.6	20.4	12.3	5.2	9.6	7.8	9.6
5390 ♂ Guayaguayare	56.0	11.0	15.0	42.0	23.5	21.1	12.9	5.4	9.4	8.0	9.1
				l'ampyro	l'ampyrodes caraccioloi						
5288 9 Guayaguayare	0.99	12.0	21.0	49.5	25.7	22.7	16.1	6.5	8.01	1.6	11.4
5355 9 San Rafael	54.0	12.0	16.0	49.5	22.6	22.6	16.2	6.1	11.0	9.1	11.4
5366 of Maracas Valley	64.0	11.0	17.0	46.8	25.9	22.5	16.0	6.2	6.01	9.0	11.2
5373 of Blanchisseuse	0.89	14.0	17.0	47.2	25.8	22.4	16.2	6.2	10.8	8.6	11.3
5509 of Las Cuevas	64.0	14.0	19.0	47.4	26.0	22.5	16.1	0.9	11.2	9.0	11.5
				Desmod	Desmodus rotundus						
5426 ♂ Guayaguayare	69.0	15.0	17.0	55.3	23.9	20.3	11.5	5.2	11.9	3.5	5.8
5894 of San Rafael	70.0	13.0	13.0	55.5	23.5	20.3	11.7	5.2	11.8	3C	5.7

TABLE 2.—Continued.

				Diaem	us voungii						
5232 Q Maracas Valley	53.0	15.0	0.71	51.0	.0 24.1	20.4	13.6	6.2	13.0	3.2	6.0
5233 of Maracas Valley	54.0	14.0	17.0	51.3	25.4	21.5	14.3	- 9	13.1	3.3	5.8
5428 of Maracas Valley	77.0	17.0	17.0	50.1	25.1	21.2	++	6.0	13.5	35.38	0.9
5411 of Las Cuevas	79.0	16.0	14.0	49.5	24.7	20.7	13.4	6.0	13.0	×.	5.9

(one), 10 August (one), and 18 August (two). Testicular measurements for adult males were as follows (dates of capture in parentheses): 1 (10 July); 1, 4 (4 August); 1 (5 August); 3 (7 August); 1, 5, 6 (19 August). Molt was observed on 31 of 34 specimens obtained between 8 July and 19 August (nonmolting individuals captured on 8 July, 10 August, and 18 August). This subspecies originally was described by Goodwin and Greenhall (1962) based on a single specimen from Talparo. They (Goodwin and Greenhall, 1964) subsequently reported five additional specimens from the island. We recognize the genus *Mesophylla* as distinct from *Ectophylla* based on morphological and karyological considerations (Greenbaum *et al.*, 1975).

Sturnira lilium lilium (É. Geoffroy St.-Hilaire)

Specimens examined (40).—St. George Co.: Blanchisseuse, 10 (1 CM); Caura Valley, 5; Las Cuevas, 13 (1 CM); Maracas Valley, 4; San Rafael, 2. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 2. Mayaro Co.: Guayaguayare, 4.

Three females taken on 2 August possessed fetuses measuring 20 and 25 in crown-rump length, whereas embryos measuring 15 and 23 were found in two females taken on 6 August. Mean testicular length of 11 adult males obtained between 2 and 6 August was 3.7 (range, 1-6). Twenty-six specimens captured between 2 and 21 August exhibited molt. Measurements of 10 specimens are given in Table 2.

Sturnira tildae de la Torre

Specimens examined (17).—St. George Co.: Blanchisseuse, 9 (1 CM); Caura Valley, 2; Las Cuevas, 2; Maracas Valley, 1; San Rafael, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 1.

Pregnant females were taken on 2 August (crown-rump length, 7) and 6 August (crown-rump lengths 10, 11, 14, 41). A lactating female was captured on 15 August. Testicular lengths of 2 were recorded for males taken on 5 and 6 August. Molt was observed on 11 specimens taken between 3 and 15 August. Our specimen from St. Andrew is the first recorded from that county. Measurements of nine specimens are given in Table 2.

Uroderma bilobatum trinitatum Davis

Specimens examined (48).—St. George Co.: Blanchisseuse, 10; Caura Valley, 2; Las Cuevas, 16; Maracas Valley, 2 (1 CM); San Rafael, 6. Mayaro Co.: Guayaguayare, 12 (1 CM).

Females carrying single embryos were taken on the following dates (crown-rump length of embryos in parentheses): 2 August (25, 27); 3 August (27); 6 August (22). Mean testicular length for 17 adult males taken between 2 and 7 August was 3.5 (range, 2-6). Twenty-one specimens captured between 7 July and 9 August were in the process of molting. Measurements of eight specimens are listed in Table 2. Davis (1968) revised this species and described the subspecies trinitatum, which is restricted to Trinidad.

Vampyrodes caraccioloi caraccioloi (Thomas)

Specimens examined (7).—St. George Co.: Blanchisseuse, 2; Las Cuevas, 1; Maracas Valley, 1; San Rafael, 1. Mayaro Co.: Guayaguayare, 4; Santa Maria, 4.

No embryos were found in three females captured between 6 and 19 August. Molt was observed on specimens taken on 3, 6, 15, and 21 August. Our specimen from Mayaro is the first to be reported from southeastern Trinidad. Measurements of six specimens are given in Table 2.

Vampyrops helleri Peters

Specimens examined (83).—St. George Co.: Blanchisseuse, 6; Caura Valley, 2; Las Cuevas, 19 (1 CM); Maracas Valley, 4; San Rafael, 24 (3 CM). 3. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 4. Mayaro Co.: Guayaguayare, 24.

Females containing single embryos were taken on the following dates (crown-rump length of embryos in parentheses): 10 July (no measurements taken); 2 August (20, 25); 3 August (20); 4 August (27, 30, 32); 5 August (25, 28, 30); 6 August (15, 20); 7 August (18, 23). A female captured on 21 August was lactating. Mean testicular length of 19 adult males taken between 2 and 7 August was 3.3 (range, 2-5). Of the 66 specimens examined for molt that were captured between 8 July and 21 August, 59 were molting. Our three specimens from Guayaguayare are the first to be reported from southeastern Trinidad.

Desmodus rotundus rotundus (É. Geoffroy St.-Hilaire)

Specimens examined (15).—St. George Co.: Blanchisseuse, 2; Las Cuevas, 3 (1 CM); Maracas Valley, 4 (1 CM); San Rafael, 2. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, I. Mayaro Co.: Guayaguayare, 3.

Of the two females examined, one was lactating when captured on 3 August. Mean testicular length of 11 adult males captured between 2 and 8 August was 5.6 (range, 4-7). Molt was observed on five individuals collected between 2 and 10 August. Our spec-

imens from St. Andrew and Mayaro are the first reported from those counties. Measurements of two males are given in Table 2.

Diaemus voungii (Jentink)

Specimens examined (6).—St. George Co.: Las Cuevas, 1; Maracas Valley, 3. St. Patrick Co.: La Brea, 2 (1 CM).

No embryos were found in single females taken on 3 and 8 August. The testes of a male taken on 8 August measured 7. Six specimens obtained between 3 and 19 August were all undergoing molt. Our specimens are the first recorded from St. George County. *D. youngii* currently is considered to be monotypic (Jones and Carter, 1976).

Natalus tumidirostris haymani Goodwin

Specimens examined (76).—St. George Co.: Blanchisseuse, 1; Las Cuevas, 6; Saut d'Eau Cave, 3. St. Andrew Co.: Mt. Tamana Cave, 66 (8 CM).

Three females collected on 2 August and 39 taken on 6 August were not pregnant; however, three were lactating on 6 August. Mean testicular length of 19 adult males taken on 2 and 6 August was 2.0 (range, 1-3). Molt was recorded from three specimens taken on 14 July, two on 5 August, and 28 on 6 August.

Thyroptera tricolor tricolor Spix

Specimens examined (3).—St. George Co.: Las Cuevas, 2; Maracas, 1.

A female captured on 5 August and one taken on 8 August were not pregnant. One specimen obtained on 5 August was undergoing molt. Measurements of a male and female are listed in Table 3.

Eptesicus brasiliensis melanopterus (Jentink)

Specimens examined (3).—St. George Co.: Blanchisseuse, 1; 2 mi. E San Rafael, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1.

A female obtained on 6 August was not pregnant. Testes of a male captured on 7 August measured 4. This species first was recorded from Trinidad by Genoways *et al.* (1973a) based on the specimen listed above from Blanchisseuse. We have followed Davis (1966) in assigning specimens to subspecies.

Myotis keaysi pilosatiabilis LaVal

Specimen examined (1).—St. George Co.: Blanchisseuse, 1.

TTU Gatalog no., sex, and locality	ІвіоТ Лідпэі	lo figue.I ligi	lo digne.1 1001 brud	length of ear	lo digne, l miserol	Greatest length of skull	lsssatolybnoi) Ingraf	Уукотайс Арвээд	Postorbiral (onstariction	lo dibesid sænistd	Length of soothow	Breadth across
				T	Thyroptera tricolor	color						
5440 Q Las Cuevas	58.0	23.0	5.0	10.0	34.0	14.4	13.0		2.5	7.0	5.6	6.4
5439 of Las Cuevas	64.0	25.0	5.0	11.0	35.6	14.9	13.4	7.2	2.5	7.1	5.8	5.1
				Ь	Promops centralis	ralm						
5248 Q Tacarigna	135.0	54.0	10.0	17.0	52.7	21.5	19.1	12.6	1.2	10.4	7.8	9.6
5249 Q Tacarigna	139.0	53.0	11.0	18.0	53.3	21.7	19.4	12.9	4.1	10.4	7.8	9.3
5250 Q Tacarigna	132.0	55.0	11.0	18.0	52.1	21.3	19.0	12.6	1.	10.4	7.9	7.6
5251 Q Tacarigna	134.0	51.0	11.0	18.0	52.0	21.0	19.2	12.8	4.3	10.2	6.7	9.6
5252 Tacarigna	137.0	57.0	13.0	18.0	53.4	21.8	5.61	12.8	4.3	10.1	7.8	9.6
5253 of Tacariena	140.0	0.55	19.0	17.0	, r	8 16	9.61	13.0	7.0	¥ 01	7.7	9

Our specimen is a nonpregnant female taken on 15 August that was molting. This specimen formed the basis of LaVal's (1973a) earlier report of this species from Trinidad.

Myotis nigricans nigricans (Schinz)

Specimens examined (4).—St. George Co.: Blanchisseuse, 1. St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 3.

Three nonpregnant females were taken on 5-6 August. Testicular measurements of an adult captured on 5 August were 3.

Myotis riparius Handley

Specimen examined (1).—St. George Co.: Blanchisseuse, 1.

Our one individual is a nonpregnant female taken on 14 August. It evinced no molt. This specimen formed the basis for the report of this species from Trinidad by LaVal (1973a).

Rhogeessa tumida riparia Goodwin

Specimens examined (3).—St. George Co.: Maracas Valley, 2; San Rafael, 1.

All specimens are nonpregnant females captured between 3 and 11 August. All were molting. LaVal (1973b) has shown that only one species of *Rhogeessa* occurs on the island of Trinidad. Karyotypic data presented by Bickham and Baker (1977) support his contention that this is the species *tumida*.

Eumops auripendulus auripendulus Shaw

Specimens examined (9).—St. George Co.: Maracas Valley, 8 (1 CM); Port-of-Spain, 1.

Seven females collected between 2 and 18 August were not pregnant. Testes measured 5 for a male taken on 2 August and 7 for one taken on 3 August. Molt was observed on five of the seven specimens collected between 3 to 18 August. The species was recorded first from Trinidad by Genoways *et al.* (1973a). Eger (1977) recently reviewed this species and used the above trinomial for specimens from Trinidad.

Molossops greenhalli greenhalli (Goodwin)

Specimens examined (5).—St. George Co.: Blanchisseuse, 5.

One female taken on 12 July possessed a single embryo, whereas two females obtained on 6 August were not pregnant. All specimens previously recorded from Trinidad were from Port-of-Spain, which is the type locality of this taxon (Goodwin, 1958).

Molossus ater ater É. Geoffroy St.-Hilaire

Specimens examined (17).—St. George Co.: Blanchisseuse, 5; Las Cuevas, 1; Maracas Valley, 2; Port-of-Spain, 7; San Rafael, 2.

A female captured on 18 August carried a single embryo measuring 35. None of the specimens (taken between 12 July and 18 August) was molting.

Molossus molossus (Pallas)

Specimens examined (120).—St. George Co.: Blanchisseuse, 8; Las Cuevas, 5; Maracas Valley, 85 (5 CM); Port-of-Spain, 7; San Rafael, 13 (2 CM). St. Andrew Co.: 2 mi. N, 2 mi. E Valencia, 1. Mayaro Co.: Guayaguayare, 1.

Females carrying single embryos were taken on the following dates (crown-rump length of fetuses in parentheses): 15 July (19); 3 August (24, 24, 29); 6 August (3, minute embryos); 13 August (18). Lactating females were captured on 2 August (one individual), 3 August (14), and 13 August (two). Mean testicular length of 24 males taken on 2 and 3 August was 4.8 (range, 3-6). Molt was recorded as occurring on 80 specimens taken between 13 July and 18 August. Our specimens from St. Andrew and Mayaro are the first to be recorded from those counties. We follow Husson (1962) in use of this name, but await application of a subspecific name until geographic variation in the species is thoroughly studied.

Promops centralis centralis Thomas

Specimens examined (6).—St. George Co.: Tacarigua, 6.

None of four females captured on 11 August was pregnant but one was lactating. All specimens were molting. Measurement of these specimens are listed in Table 3.

CHECKLIST OF THE BATS OF TRINIDAD

Below is a checklist of the bat fauna of Trinidad as it is currently known. Citations indicate the bases for changes from Goodwin and Greenhall (1961).

EMBALLONURIDAE

Peropteryx macrotis trinitatus Rhynchonycteris naso—Husson, 1962. Saccopteryx bilineata bilineata— Husson, 1962; Alvarez, 1968. Saccopteryx leptura Diclidurus albus

NOCTILIONIDAE

Noctīlio leporinus mastivus—Davis, 1973.

MORMOOPIDAE

Mormoops megalophylla tumidiceps Pteronotus davyi davyi Pteronotus parnellii rubiginosus-Smith, 1972.

Pteronotus personatus personatus— Smith, 1972.

PHYLLOSTOMIDAE

PHYLLOSTOMINAE.

Lonchorhina aurita aurita Micronycteris brachyotis Micronycteris hirsuta Micronycteris megalotis megalotis Micronycteris minuta Micronvcteris nicefori Micronveteris minuta Mimon crenulatum crenulatum Phylloderma stenops stenops— Goodwin and Greenhall, 1964; Handley, 1966.

Phyllostomus discolor discolor Phyllostomus hastatus hastatus Tonatia bidens bidens-Koopman,

Tonatia brasiliense—Gardner, 1976; Handley, 1976; Koopman, 1978. Trachops cirrhosus cirrhosus—Jones and Carter, 1976.

Vambyrum spectrum—Husson, 1962; Handley, 1966.

GLOSSOPHAGINAE

Anoura geoffroyi geoffroyi Choeroniscus intermedius Glossophaga longirostris major Glossophaga soricina soricina

CAROLLINAE

Carollia perspicillata perspicillata

STENODERMATINAE

Ametrida centurio - Goodwin and Greenhall, 1964; Peterson, 1965. Artibeus cinereus cinereus Artibeus jamaicensis trinitis Artibeus lituratus palmarum Centurio senex greenhalli-Paradiso, 1967.

Chiroderma trinitatum trinitatum-Barriga-Bonilla, 1965; Handley, 1966. Chiroderma villosum villosum Enchisthenes hartii

Mesophylla macconnelli flavescens-Goodwin and Greenhall, 1962; Greenbaum et al., 1975. Sturnira lilium lilium

Sturnira tildae

Uroderma bilobatum trinitatum -Davis 1968

Vampyrodes caraccioloi caraccioloi Vampyrops helleri

DESMODONTINAE

Desmodus rotundus rotundus Diaemus youngii

NATALIDAE

Natalus tumidirostris haymani

FURIPTERIDAE

Furipterus horrens

THYROPTERIDAE

Thyroptera tricolor tricolor

VESPERTILIONIDAE

Eptesicus brasiliensis melanopterus-Genoways et al., 1973a. Lasiurus borealis frantzii Lasiurus ega panamensis-Handley,

Myotis keaysi pilosatiabilis-LaVal, 1973a.

Myotis nigricans nigricans Myotis riparius-LaVal, 1973a. Rhogeessa tumida riparia-LaVal, 1973b.

MOLOSSIDAE

Eumops auripendulus auripendulus-Genoways et al., 1973a; Eger, 1977. Molossops greenhalli greenhalli-Jones and Genoways, 1967.

Molossus ater ater

Molossus molossus-Husson, 1962. Molossus sinaloae trinitatus-Handley,

Promops centralis centralis - Ojasti and Linares, 1971; Koopman, 1978.

Promops nasutus downsi-Goodwin and Greenhall, 1962.

Tadarida europs

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